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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,608	10/17/2003	Oliver C. Ibe	0012.0001US1	2438
29127	7590	01/26/2006	EXAMINER	
HOUSTON ELISEEVA 4 MILITIA DRIVE, SUITE 4 LEXINGTON, MA 02421			MILLER, BRANDON J	
			ART UNIT	PAPER NUMBER
			2683	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/688,608

Applicant(s)

IBE ET AL.

Examiner

Brandon J. Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-7 and 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-7 and 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Dorenbosch.

Regarding claim 7 Dorenbosch teaches a flexible method of routing calls originating within an enterprise (see paragraphs [0020], [0021] & [0036]). Dorenbosch teaches forwarding calls to a cellular wireless network via a cellular proxy and the cellular proxy forwarding the calls from the cellular wireless network to the Internet or a private IP network via an enterprise router (see paragraph [0019] and FIG. 2).

Dorenbosch teaches using a virtual private network (VPN) (see paragraph [0038]).

Regarding claim 10 Dorenbosch teaches a system for managing calls between a wireless local area network and a cellular carrier network (see paragraph [0020], [0021] & [0036]). Dorenbosch teaches a dual mode mobile terminal capable of communicating over the wireless local area network and the cellular carrier network (see paragraph [0016], [0020], and FIG. 1). Dorenbosch teaches a controller that registers and emulates the mobile terminal on the cellular carrier network when the mobile terminal is

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communicating via the wireless local area network and routes the calls received from the cellular carrier network to the terminal over the wireless local area network (see paragraph [0025] & [0031]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6, 14-16, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorenbosch in view of Bridgelall.

Regarding claim 5 Dorenbosch teaches a device as recited in claim 10 except for wherein the mobile terminal does not register in the cellular carrier network as it moves from the local area network into the cellular carrier network and the mobile terminal inherits call parameters of the controller and switches its radio to the cellular carrier network using the call parameters. Bridgelall teaches wherein the mobile terminal does not register in the cellular carrier network as it moves from the local area network into the cellular carrier network and the mobile terminal inherits call parameters of the controller and switches its radio to the cellular carrier network using the call parameters (see abstract and paragraph [0075]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the mobile terminal does not register in the cellular carrier network as it moves from the local area network into the cellular carrier network and the mobile terminal inherits call parameters of the controller and switches its radio to the cellular carrier network using the

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call parameters because this would allow for efficient roaming between two wireless networks while maintaining an active connection.

Regarding claim 6 Bridgelall teaches implementing a TDM-to-VoIP and VoIP-to-TDM conversion (see paragraphs [0076] & [0084]).

Regarding claim 14 Dorenbosch teaches a device as recited in claim 10 except for wherein the mobile terminal attempts to register with the wireless local area network and only registers with the cellular carrier network if registration with the wireless local area network is unsuccessful. Bridgelall teaches wherein the mobile terminal attempts to register with the wireless local area network and only registers with the cellular carrier network if registration with the wireless local area network is unsuccessful (see paragraph [0075]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the mobile terminal attempts to register with the wireless local area network and only registers with the cellular carrier network if registration with the wireless local area network is unsuccessful because this would allow for improved roaming between two wireless networks while maintaining a reliable connection.

Regarding claim 15 Dorenbosch teaches a device as recited in claim 10 except for wherein the calls are monitored for call quality over the wireless local area network. Bridgelall teaches wherein the calls are monitored for call quality over the wireless local area network (see paragraph [0075]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the calls are monitored for call quality over the wireless local area network because this

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would allow for improved roaming between two wireless networks while maintaining a reliable connection.

Regarding claim 16 Dorenbosch teaches wherein the call quality degrades to a threshold, the mobile terminal switches to communicating over the cellular carrier network (see paragraph [0075]).

Regarding claim 20 Dorenbosch and Bridgelall teaches a device as recited in claim 15 and is rejected given the same reasoning as above.

Regarding claim 21 Dorenbosch and Bridgelall teaches a device as recited in claim 16 and is rejected given the same reasoning as above.

Regarding claim 22 Dorenbosch and Bridgelall teaches a device as recited in claim 21 except for wherein when the call quality degrades to the threshold, the controller monitors communications for the mobile terminal on the cellular carrier network maintaining the call and sends communications to the mobile terminal via the local area network and communications from the mobile terminal to the cellular carrier network via a fixed antenna. Bridgelall does teach wherein when the call quality degrades to the threshold, the controller monitors communications for the mobile terminal on the cellular carrier network maintaining the call and sends communications to the mobile terminal via the local area network and communications from the mobile terminal to the cellular carrier network via a fixed antenna (see paragraphs [0075] & [0076] and FIG. 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein when the call quality degrades to the threshold, the controller monitors communications for the mobile terminal on the cellular carrier network maintaining the call and sends communications to the mobile terminal via

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the local area network and communications from the mobile terminal to the cellular carrier network via a fixed antenna because this would allow for improved roaming between two wireless networks while maintaining a reliable connection.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorenbosch in view of Pan.

Regarding claim 11 Dorenbosch teaches a device as recited in claim 10 except for wherein the calls from the cellular carrier network are received via a fixed radio terminal of a controller. Pan teaches wherein calls from the cellular carrier network are received via a fixed radio terminal of a controller (see paragraphs [0037] & [0038]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the calls from the cellular carrier network are received via a fixed radio terminal of a controller because this would allow for an improved method for implementing bi-directional handovers between a cellular network and another wireless network without cellular network intervention.

Regarding claim 12 Dorenbosch teaches a device as recited in claim 10 except for wherein the mobile terminal is assigned two telephone numbers, one for the cellular carrier network and one for a private branch exchange. Pan teaches wherein the mobile terminal is assigned two telephone numbers, one for the two networks (see paragraph [0025]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the mobile terminal is assigned two telephone numbers, one for the cellular carrier network and one for a private branch exchange because this would allow for an improved method for

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implementing bi-directional handovers between a cellular network and another wireless network without cellular network intervention.

Regarding claim 13 Dorenbosch and Pan teaches a device as recited in claim 12 except for wherein calls placed to the telephone number of the cellular carrier network are received by the controller and routed to the mobile terminal via the wireless local area network when the mobile terminal is on the local area network and calls placed to the telephone number of the private branch exchange are received by the controller and routed to the terminal via the wireless local area network when the mobile terminal is on the local are network. Pan does teach wherein calls placed to the telephone number of the cellular carrier network are received by the controller and routed to the mobile terminal via the wireless local area network when the mobile terminal is on the local area network and calls placed to the telephone number of the private branch exchange are received by the controller and routed to the terminal via the wireless local area network when the mobile terminal is on the local are network (see paragraphs [0037] & [0038]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein calls placed to the telephone number of the cellular carrier network are received by the controller and routed to the mobile terminal via the wireless local area network when the mobile terminal is on the local area network and calls placed to the telephone number of the private branch exchange are received by the controller and routed to the terminal via the wireless local area network when the mobile terminal is on the local are network because this would allow for an improved method for implementing bi-directional handovers between a cellular network and another wireless network without cellular network intervention.

Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorenbosch in view of Bridgelall and Pan.

Regarding claim 17 Dorenbosch and Bridgelall teach a device as recited in claim 16 except for wherein if the call is on a phone number of a private branch, when mobile terminal is switching to communicating over the cellular carrier network, then the controller calls a telephone number of the mobile terminal on the cellular carrier network and routes the call to the mobile terminal through the cellular carrier network. Pan teaches if the call is on a phone number of a private branch, when mobile terminal is switching to communicating over the cellular carrier network, then the controller calls a telephone number of the mobile terminal on the cellular carrier network and routes the call to the mobile terminal through the cellular carrier network (see paragraph [0037] & [0038]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein if the call is on a phone number of a private branch, when mobile terminal is switching to communicating over the cellular carrier network, then the controller calls a telephone number of the mobile terminal on the cellular carrier network and routes the call to the mobile terminal through the cellular carrier network because this would allow for an improved method for implementing bi-directional handovers between a cellular network and another wireless network without cellular network intervention.

Regarding claim 18 Pan teaches wherein if the call is on a phone number of the cellular carrier network, when mobile terminal is switching to communicating over the cellular carrier network, then the controller handoffs the call to the mobile terminal,

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which then activates communications for the cellular carrier network (see paragraphs [0037] & [0038]).

Regarding claim 19 Pan teaches a device as recited in claim 18 and is rejected given the same reasoning as above.

Claim Objections

Claims 15 and 17-22 objected to because of the following informalities: Claims 15 and 17-22 are missing the proper status identifiers. Appropriate correction is required.

Response to Arguments

Applicant's arguments with respect to claims 5-7 and 10-22 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wejke et al. U.S Patent No. 5,175,867 discloses neighbor-assisted handoff in a cellular communications system.

Crosbie Pub. No.: US 2002/0035699 A1 discloses method and system for enabling seamless roaming in a wireless network.

Rines Pub. No.: US 2002/0114318 A1 discloses voice over Internet protocol.

Sharma et al. Pub. No.: US 2002/0068559 A1 discloses a method and system for remote and local mobile network management.

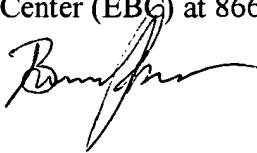
Sundar et al. Pub. No.: US 2003/0134650 A1 discloses a method, system and apparatus for internetworking a mobile station to operate in a WWAN environment and in a WLAN environment with PBX services.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



January 17, 2006



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